

### **Douglas County Conservation District 3-Year Plan** (2009 to 2011)

### **Executive Summary**

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### **Organization of the Douglas County Conservation District**

A political subdivision of the State of Colorado – authorities, powers and structure contained in Colorado Revised Statutes, Title 35, Article 70.

**District History:** The district was formed with the West Plum Creek Soil Erosion District; which was established on February 7, 1940. Three years later, on May 5, 1943, the Cherry Creek Soil Conservation District was formed. These organizations came out of the landowner's recognition of a need to control and prevent further deterioration of the Natural Resources after the drought in the 1930's.

On October 6, 1959 the Boards of Supervisors of Cherry Creek SCD & West Plum Creek SCD met in joint session and agreed unanimously to petition the CSSCB in an attempt to consolidate the two districts. They felt since their conservation problems and programs were alike in every aspect, a consolidation would be in the best interest of the people within the districts.

The official consolidation came on September 15, 1960 from the Secretary of State George J. Baker under the Provisions of 128-1-19, Colorado Revised Statutes 1953 and under the lawful organization name of Douglas County Soil Conservation District. This new district covers nearly all of Douglas County, except the original incorporated towns and a few landowners that chose not to participate.

The district is governed by 7 supervisors serving the district as stated in the district bylaws.

### **Function of the Douglas County Conservation District**

To make available technical, financial and educational resources, whatever their source, and focus or coordinate them so that they meet the needs of the local land manager with conservation of soil, water and related natural resources.

### The Mission of the Douglas County Conservation District

is to promote projects through education to further the long term sustainable use of natural resources balancing the needs of agriculture and urban growth.

### Trends Impacting Conservation in the Douglas County Conservation District

The most significant trend impacting conservation in the district is the urbanization of agricultural lands. With this growth, the concerning issues are water quantity for all uses and water quality. The district also has many new and existing small acreage landowners that are unaware of the conservation issues that are on their land such as denuded land due to over grazing, noxious weed infestation, and soil erosion by wind and water. Forested areas are becoming populated with more homes which impact forest health due to fire suppression. The conservation concerns in these forests are lack of defensible space and fire mitigation, and forest health issues such as beetle kill, mistletoe, etc.

### **Natural Resource Data**

Douglas County is very diverse in the terrain, with 842 square miles equaling a total land area of 539,072 acres.

**Ag Land:** There are 903 farms and ranches totaling 199,491 acres. The average size farm/ranch is 221 acres, and the medium size farm/ranch is 55 acres. Total non-irrigated cropland is 50,929 acres and 3,533 acres of irrigated cropland.

**Environmental:** Douglas County is located within a geographic area prone to receiving intense rainfall, resulting in major flooding of streams and drainage ways, primarily Plum Creek, Cherry Creek, and the South Platte River. There are 22 PL566 Flood control dams in the county whose operation and

maintenance are the responsibility of the Douglas County Conservation District and Douglas County Government, as both are sponsors of these dams.

**Forest:** About ¼ of Douglas County is comprised of forested area. A portion of this forest was burned in the 2002 Hayman Fire. Forestry concerns are beetle kill, mistletoe in Ponderosa Pine stands, trees that have been stressed due to drought, defensible space as well as fire mitigation awareness for landowners.

**Open Space:** Douglas County has over 11,000 acres of open space for public access and has protected over 45,000 acres of land through conservation easements. The lands were strategically purchased for the preservation of important wildlife habitat and wildlife movement corridors.

**Private Lands:** Outside of the municipalities are rural areas which consist of 2 to 60 acre parcels. These landowners face many different conservation issues such as noxious weeds, wildlife control, soil erosion, land management issues, water quality and quantity, and forestry concerns. Most of the district's focus is to educate these landowners about these issues.

Water is one of the most critical issues facing Colorado. Douglas County is located within a semi-arid climate zone where rainfall is not sufficient to replenish diminishing groundwater supplies. The three main surface water supplies in the county are the South Platte River, Cherry Creek, and Plum Creek and they have largely been appropriated. Two distinct geologic strata underlie portions of Douglas County. Approximately 485 square miles of the Denver Basin in the east, and the pre-Cambrian granite rocks of the Pike National Forest and the Rampart Range are in the west. The four principal bedrock formations forming the Denver Basin are the Dawson aquifer, Denver aquifer, Arapahoe aquifer, and Laramie-Fox Hills aquifer.

### Natural Resource Priorities and Goals

### Land Management

(Noxious weeds, Range/Pasture Management, Erosion control)
Goal: Encourage and assist in environmentally responsible rural land use in the district.

Objective 1: Increase awareness of noxious weeds in the county beginning with proper identification, followed by teaching proper control methods through the district website, brochures, newsletter articles and seminars.

Objective 2: Prevention of land from becoming denuded of vegetation through educating landowners in using proper grazing management techniques through the district website, handouts, newsletter articles, and seminars which in turn deters noxious weed invasions and erosion of the soil.

Objective 3: Education is very important to achieve this goal. The district will sponsor one seminar each year (2009-2011) to educate landowners on how to be good stewards of the land.

### Watershed Flood Control Dams

(Twenty-two PL-566 Flood Control Dams)

Goal: Maintain the operation of the dams for protection of human life and property from flood waters.

Objective 1: Continue to have scheduled inspections on the 22 flood control dams on a five year rotation every 5 years or sooner if there has been a major storm event.

Objective 2: Continue to work closely with Douglas County Government along with technical assistance from NRCS to maintain these structures to the satisfaction of the State Dam Safety Engineer by completing needed work on dams to ensure the integrity of the structures. Also to research funding opportunities to assist in the cost of maintaining these dams

Objective 3: Work on a publicity campaign for public awareness to educate the Douglas County residence of the purpose for the construction of the dams and the benefits.

### Forest Health

(Fire Mitigation, Defensible Space, Beetle Kill)

Goal: Promote forest health for the safety of human life, maintaining wildlife habitat, and minimizing negative environmental impacts of forested land in the district.

Objective1: Education and awareness in forested areas for the need of defensible space around dwellings, and fire mitigation through tree thinning and tree health. Education will come from available brochures, new releases, newsletter and seminar planned for 2009.

### Water Quantity and Quality

(Cherry Creek, Plum Creek and Ground water)

Goal: Promote water quality for human, animal, plant health and conserve and safeguard groundwater use for future generations.

Objective 1: Continue to research the amount of water accessible in the Denver Basin and assist the county through our review comments of development to increase their awareness of the data.

Objective 2: Educate and increase awareness in the public in conserving water through planting native species, and xeriscaping with drought tolerant plants.

Objective 3: Research areas of non-point source activity that impacts water quality and educate offenders.

Objective 4: Encourage and make the public aware of proper use, storage, and proper disposal of chemicals by promoting the county chemical cleanup of old pesticides, fertilizers, and other chemicals on their property.

### Natural Resource Information /Education Priorities and Goals

- Natural Resources Conservation Awareness in District Residents
   Goal: To develop awareness in school students of the natural resources in the community and further their education in conservation-related fields.
  - Objective 1: Sponsor one youth to attend Camp Rocky in July of each year (2009-2011).
  - Objective 2: Sponsor one classroom for an entire school year to receive the "Colorado Reader" for each year during 2009-2011 to further their understanding of agriculture and its importance to all.
  - Objective 3: Sponsoring two college students to receive \$500.00 each to further their education and major in an agricultural related field of study. Two scholarships awarded each year (2009-2011).

Objective 4: Sponsoring seven schools to participate in the 4<sup>th</sup> Grade Foresters USA program to educate students of proper planting and care of trees. They all receive their own tree to plant and care for.

Goal: To educate the new rural landowners of the many conservation issues they will come across with the purchase of acreage in the county.

Objective 1: The district will produce a pamphlet for county landowners with specific conservation issues and solutions to promote good land stewardship.

### Staffing Needs:

The staffing positions necessary to do all the things listed in this Long Range Plan consist of a District administrator and a part-time clerk.

### **Conservation District Operational Goals & Objectives**

### Operational Needs

Goal: Douglas County Conservation District will continue to enable the Board of Supervisors and staff to effectively accomplish our mission.

- Objective 1: The District will encourage attendance of available training through online review of Colorado State Conservation Board Powerpoint presentations and training sessions conducted by other organizations for the Board of Supervisors to more effectively achieve district goals.
- Objective 2: The District will encourage staff training in areas which will assist employees in effectively performing the duties required of them.
- Objective 3: The District to post official public documents such as the annual plan of work, board minutes, and special project reports on the district website for public accessibility.

## Natural Resource Goals & Objectives

Long Range Plan for: 2009 - 2011

Natural Resource Issue: Land Management

Why is this issue a concern and what is the location: Agricultural land has been subdivided into small acreage with many landowners not familiar with proper land management. The location is mainly the southeastern 34 of Douglas County east of 1-25.

Three Vear Goal(s): Encourage and assist in environmentally responsible rural land use in the district.

PROGRAM YEAR	MEASURABLE ANNUAL OBJECTIVES	COOPERATING AGENCY/GROUP	TIME AND FUNDING NEEDED	SOURCE OF FUNDING
1 N Year	<ul> <li>A. Work with DC Weed Inspector to locate new infestations of State "A" list noxious weeds in the county to focus on these areas and to increase awareness of noxious weeds.</li> <li>B. Educate small acreage landowners to avoid denuded land which prevents other conservation issues/problems.</li> <li>C. Host an educational seminar for landowners</li> <li>D. Assist landowners with on the ground conservation through Cost-Share Grant</li> </ul>	NRCS, CSU Ext., DC Weed Inspector, Land Owners	120 Hrs \$1,800	Direct Assistance Cost - Share Grants from CSCB, and High Plains Invasive Program
2 <sup>nd</sup> Year	<ul> <li>A. Continue location of "A" list weeds and focus on these areas and increasing the awareness of noxious weeds.</li> <li>B. Educate small acreage landowners to first avoid denuded land which prevents other conservation issues/problems.</li> <li>C. Host an educational seminar for landowners.</li> <li>D. Assist landowners with on the ground conservation through Cost-Share Grant</li> </ul>	NRCS, CSU Ext., DC Weed Inspector, Land Owners	120 Hrs \$1,800	Direct Assistance Cost - Share Grants from CSCB, and High Plains Invasive Program
3rd Year	<ul> <li>A. Continue location of "A" list weeds and focus on these areas and increasing the awareness of noxious weeds.</li> <li>B. Educate small acreage landowners to first avoid denuded land which prevents other conservation issues/problems.</li> <li>C. Host an educational seminar for landowners.</li> <li>D. Assist landowners with on the ground conservation through Cost-Share Grant</li> </ul>	NRCS, CSU Ext., DC Weed Inspector, Land Owners	120 Hrs \$1,800	Direct Assistance Cost - Share Grants from CSCB, and High Plains Invasive Program

## Natural Resource Goals & Objectives

Long Range Plan for: 2009 – 2011

Natural Resource Issue: Watershed Flood Control Dams

Why is this issue a concern and what is the location: Twenty-two flood control dams located throughout Douglas County are reaching their life expectancy (50 years) and they require maintenance to function properly to prevent flood waters from causing property damage and/or loss of life. Three Vear Goal(s): Maintain the operation of the dams for protection of human life and property from flood waters.

PROGRAM YEAR	MEASURABLE ANNUAL OBJECTIVES	COOPERATING AGENCY/GROUP	TIME AND FUNDING NEEDED	SOURCE OF FUNDING
1 <sup>st</sup> Year	A. Dams on the rotation schedule will be inspected. The results of the inspection reports will constitute any repairs that need to be completed by the sponsors. A work schedule will be generated to maintain dams on a priority basis.  B. Funding opportunities will be researched to assist in the cost of repairing these flood control dams.	Natural Resources Conservation Services (NRCS), State Dam Safety Engineer, Douglas County Government.	32 Hrs \$576.00	Douglas County Government
2 <sup>nd</sup> Year	A. Continue to inspect dams on the rotation schedule. The results of the inspection reports will constitute any repairs that need to be completed by the sponsors. A work schedule will be generated to maintain dams on a priority basis.  B. Continue to research funding opportunities to assist in the cost of repairing these flood control dams.  C. Work on a publicity campaign to increase the awareness of these dams with the assistance of NRCS Public Affairs.	NRCS, State Dam Safety Engineer, Douglas County Government.	46 Hrs \$828.00	Douglas County Government
3rd Year	A. Continue to inspect dams on the rotation schedule. The results of the inspection reports will constitute any repairs that need to be completed by the sponsors. A work schedule will be generated to maintain dams on a priority basis.  B. Continue to research funding opportunities to assist in the cost of repairing these flood control dams.  C. Continue the publicity campaign to increase the awareness of these dams with the assistance of NRCS Public Affairs.	NRCS, State Dam Safety Engineer, Douglas County Government.	46 Hrs \$828.00	Douglas County Government

## Natural Resource Goals & Objectives

Long Range Plan for: 2009 - 2011

Natural Resource Issue: Forest Health

County. The concern is for the safety of life, homes, wildlife and negative impacts due to fire. The location is west of I-25 in the forested areas. Why is this issue a concern and what is the location: Many new homes and dwellings have been built within the forested areas of Douglas

Three Year Goal(s): Promote forest health for the safety of human life, maintaining wildlife habitat, and minimizing negative environmental impacts of forested land in the district.

PROGRAM VEAR	MEASURABLE ANNUAL OBJECTIVES	COOPERATING AGENCY/GROUP	TIME AND FUNDING NEEDED	SOURCE OF FUNDING
X X Sea	A. Locate all Home Owners Associations located in the forested areas of Douglas County. Sponsor an educational seminar with the CSFS and CSU Ext. for these landowners on important information on defensible space, forest health through thinning of dead and diseased trees, and fire mitigation on property to reduce the chance of a devastating fire.  B. Education/Information literature, news releases, and information on the website will be available for landowners.	Natural Resources Conservation Service (NRCS), Colo State Forest Service (CSFS) CSU Ext., Land Owners	75 Hrs \$1,350	Direct Assistance Cost Share Grant
	through Cost-Share Grant			
2nd Year	A. Continue to contact Forested landowners for education on forest health.  B. Education materials available through news releases, on website for landowners.  C. Assist landowners with on the ground conservation through Cost-Share Grant	NRCS, CSFS, CSU Ext., Land Owners	75 Hrs \$1,350	Direct Assistance, Cost Share Grant
3rd Year	<ul> <li>A. Continue to contact Forested landowners for education on forest health.</li> <li>B. Education materials available through news releases, on website for landowners.</li> <li>C. Assist landowners with on the ground conservation through Cost-Share Grant</li> </ul>	NRCS, CSFS, CSU Ext., Land Owners	75 Hrs \$1,350	Direct Assistance, Cost Share Grant

## Natural Resource Goals & Objectives

Long Range Plan for: 2009 - 2011

Natural Resource Issue: Water Quantity and Quality

many wells to be drilled for water groundwater use which depletes the non-renewable resources. The location would consist of mainly the entire county east of the forested area. With the many subdivisions and commercial buildings creating large areas of asphalt, the storm water runoff consists of more pollutants Why is this issue a concern and what is the location: Urban growth and the division of land that has been taking place in Douglas County has triggered such as pesticides, fertilizers, petroleum, etc. and at a faster rate to create more soil erosion into Cherry Creek and Plum Creek.

Three Year Goal(s): Conserve and safeguard groundwater use for future generations, and promote water quality for human, animal, and plant health.

PROGRAM YEAR	MEASURABLE ANNUAL OBJECTIVES	COOPERATING AGENCY/GROUP	TIME AND FUNDING	SOURCE OF FUNDING
<b>1</b> 3 A	A. Research groundwater accessibility/availability in the Denver Basin for Eastern Douglas County. With this information, the district will continue to make comments on reviews to the Douglas County Planning on water quantity for proposals.  B. Educate the public in the practicing water conservation through native species and drought tolerant plant species recommended for planting in the this zone.  C. Monitor areas of non-point source impacts along Cherry and Plum Creek and inform landowners on using proper conservation practices to combat the negative impacts on water quality.  D. Promotion of proper use, storage and disposal of chemicals through the yearly county chemical roundup will be advertised.	Natural Resources Conservation Services (NRCS) CSU Ext., DC Landowners, Division of Water Resources, Denver Water Board.	52 Hrs \$936.00	Direct Assistance
2 <sup>nd</sup> Year	A. Continue to update status of groundwater availability in the Denver Basin to assist in the counties growth decisions.  B. Continue Educating the public in practicing conscious water conservation through native species and drought tolerant plant species.  C. Continue monitoring areas of non-point source impacts along Cherry Creek, and Plum Creek.  D. Continue to promote proper use, storage and disposal of chemicals.	NRCS, CSU Ext., DC Landowners, Division of Water Resources, Denver Water Board.	52 Hrs \$936.00	Direct Assistance
3rd Vear	A. Continue monitoring areas of non-point source impacts along Cherry Creek, and Plum Creek.  B. Promote yearly chemical roundup to ensure that old pesticides, fertilizers, and other chemicals are properly disposed of away from water sources.  C. Educate public of proper use, storage, and disposal of Chem.	NRCS, CSU Ext., DC Landowners, Division of Water Resources, Denver Water Board.	52 Hrs \$936.00	Direct Assistance

### RESOLUTION OF ADOPTION

Date

THEREFORE, Be It Resolved that this Long Range Program of the Douglas County Conservation District be adopted as the official program of the District as of this 19<sup>th</sup> day of March, 2008.

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Reviewed by the Colorado State Conserv	ation Board
President	Cindy Lair, Program Manager